AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

Add a new paragraph after the title at page 1, between lines 3 and 4, and insert new section headings as follow:

CROSS REFERENCE TO RELATED APPLICATIONS

This application is a national phase application of International Application Number PCT/JP2004/019097, filed December 21, 2004, and claims the priority of Japanese Patent Application No. 2003-426617, filed December 24, 2003, the contents of both of which are incorporated herein by reference.

BACKGROUND OF THE INVENTION

Page 1, line 4, before paragraph [0001], delete ~~Technical Field~~, inert Field of the Invention

Page 1, line 11, before paragraph [0002], delete ~~Background Art~~, insert Description of the Related Art

Page 3, line 9, before paragraph [0007], delete ~~Disclosure of the Invention~~

Page 3, line 10, paragraph [0007], delete ~~Problem to Solved by the Invention~~

Page 4, between lines 12 and 13, before paragraph [0011], add the following new section heading:

SUMMARY OF INVENTION

Page 4, line 21, delete ~~Means for Solving Problem~~

Please amend the 12th ([0012]) full paragraph, page 4, line 21 to page 5, line 8, as follows:

[0012] For solving the above-mentioned problems, the ~~present invention~~ embodiment provides a projection optical system for forming a reduced image of a first surface onto a second surface comprising a first reflective imaging optical system for forming an intermediate image of the first surface and a second reflective imaging optical system for forming an image of the intermediate image onto the second surface; the first reflective imaging optical system including a concave first reflector, a concave second reflector ~~equipped with an aperture stop~~, a convex third reflector, and a concave fourth reflector successively as light enters from the first surface side; the second reflective imaging optical system including a concave fifth reflector, a concave sixth reflector, a convex seventh reflector, and a concave eighth reflector successively as light enters from the first surface side.

Please amend the 17th ([0017]) full paragraph, at page 5, line 25 to page 6, line 3 as follows:

[0017] The ~~present invention~~ embodiment provides an exposure apparatus comprising an illumination system for illuminating a mask set on the first surface, and the projection optical system mentioned above for projecting and exposing a pattern of the mask onto a photosensitive substrate set on the second surface.

Page 6, line 9, delete ~~Effect of the Invention~~

Please cancel the 19th ([0019]), 20th ([0020]), 21st ([0021]), and 22nd ([0022]) full paragraphs at page 6, line 10 to page 7, line 7, as follows:

~~[0019] Since the aperture stop AS is arranged at the second reflector in the projection optical system of the present invention, aperture stop members can be kept from eclipsing beam bundles as much as possible, whereby the beam bundles can be~~

~~guided with a margin. The third, fourth, fifth, and sixth reflectors have strong curvatures to some extent, so as to yield forms effective in correcting aberrations, whereby the projection optical system can attain a numerical aperture at a predetermined value or greater.~~

~~[0020] Since the third to sixth reflectors have stronger curvatures, each reflector in the projection optical system can reduce its effective diameter, whereby the fourth reflector, which is likely to increase its effective diameter in particular, can keep the effective diameter small. Namely, the present invention can realize a reflective projection optical system which exhibits a favorable reflection characteristic with respect to X-rays as well, restrains the reflectors from becoming bulky, and has favorably corrected aberrations.~~

~~[0021] By employing the projection optical system of the present invention, the exposure apparatus can use X-rays as exposure light. In this case, the pattern of the mask is projected and exposed onto the photosensitive substrate by moving the mask and photosensitive substrate relative to the projection optical system.~~

~~[0022] As a result, high-precision microdevices can be manufactured under favorable exposure conditions by using a scanning exposure apparatus with a high resolving power.~~

Page 8, line 3, delete ~~Explanations of Numerals~~

Please cancel the 24th ([0024]) full paragraph at page 8, lines 4-14, as follows:

~~[0024] 1 laser plasma X-ray source~~

~~2 wavelength-selective filter~~

~~3 illumination optical system~~

~~4 mask~~

~~5 mask stage~~

~~6 projection optical system~~

~~7 wafer~~

~~8 wafer stage~~

~~M1 to M8 reflector~~

~~AS aperture stop~~

~~IMI intermediate image~~

Page 8, line 15, please amend the section heading as follows:

~~Best Modes for Carrying Out the Invention~~ Detailed Description of the Invention

Page 36, line 5, please delete, ~~Industrial Applicability~~

Please cancel the 86th ([0086]) full paragraph, as follows:

~~[0086] The present invention can be utilized as a projection optical system whose numerical aperture (NA) is at a predetermined value or greater and an exposure apparatus comprising the projection optical system.~~